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In the claims:

Claims 1-11 canceled.

12. (Currently Amended) A method of fabricating a superconducting magnet support structure comprising:

generating a design criteria for a superconducting magnet;

designing a preformed support tooling for the superconducting magnet coil support structure in response to said design criteria;

providing said preformed support tooling dimensioned according to said design criteria ~~for the superconducting magnet;~~

~~designing a preformed support tooling for the superconducting magnet coil support structure and generating design criteria;~~

applying an integrated multi-layer glass tape to said preformed support tooling by a wet winding process;

thereafter, curing said multi-layer glass tape;

machining said cured multi-layer glass tape before application of said superconducting magnet to the superconducting magnet support structure; and

removing said preformed support tooling.

13. (Original) A method as in claim 1 wherein 12 wherein applying an integrated multi-layer glass tape comprises applying roving to said preformed support tooling at approximately 0° and 90° directions relative to a center axis extending through the resulting superconducting magnet support structure.

14. (Original) A method as in claim 12 wherein the step of providing said preformed support tooling comprises:

determining dimensions of the superconducting magnet;

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determining dimensions of space available for said superconducting magnet coil support structure;

determining a mounting configuration of said superconducting magnet coil support structure;

designing dimensions of said superconducting magnet coil support structure to accommodate for said dimensions of said superconducting magnet, said dimensions of space available, and said mounting configuration; and

designing dimensions of said preformed support tooling to accommodate said designing dimensions of said superconducting magnet coil support structure.

15. (Original) A method as in claim 12 wherein the step of performing a wet winding process comprises:

feeding a dry tape through a delivery system;

applying resin to said tape at a predetermined rate; and

winding said tape onto said preformed support tooling.

16. (Original) A method as in claim 12 wherein said wet winding process is computer controlled.

17. (Original) A method as in claim 12 wherein applying an integrated multi-layer glass tape comprises overlapping a plurality of fiberglass tape strips.

18. (Original) A method as in claim 12 wherein applying an integrated multi-layer glass tape comprises varying the width of said integrated multi-layer glass tape.

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19. (Original) A method as in claim 12 wherein applying an integrated multi-layer glass tape comprises varying at least one of the following: roving material weight, overlap percentage, winding tension, and resin soak time.

20. (Original) A superconducting magnet coil support structure formed according to the method of claim 12.